

Title (en)  
PACKAGE RECOGNITION SYSTEM

Title (de)  
PACKUNGSERKENNUNGSSYSTEM

Title (fr)  
SYSTÈME DE RECONNAISSANCE D'EMBALLAGE

Publication  
**EP 2989942 A1 20160302 (EN)**

Application  
**EP 15188381 A 20130702**

Priority

- EP 12175405 A 20120706
- EP 12175406 A 20120706
- EP 13160328 A 20130321
- EP 13160324 A 20130321
- EP 13160325 A 20130321
- EP 13160326 A 20130321
- EP 13160342 A 20130321
- EP 13732585 A 20130702
- EP 2013063942 W 20130702

Abstract (en)

The invention provides a beverage production machine having an apparatus for recognising a package. The apparatus comprises two resonant tank circuits, each comprising a coil and a capacitor; two electronic circuits for detecting changes in coil impedance; a means for generating a signal which is indicative of the changes; and means for controlling the beverage production machine according to the signal. The machine also comprises a holder for supporting the package. The package for use in the machine comprises a base unit having a compartment which contains tea material, and a rim with a projecting lip; conductive material associated with the package having two edge sections situated on opposite sides of the compartment; and a lid attached to the base unit around the rim, the central portion of the lid comprising at least one perforated line. The invention also provides a method of recognising the package.

IPC 8 full level  
**A47J 31/06** (2006.01); **A47J 31/44** (2006.01); **B65D 85/804** (2006.01)

CPC (source: EP US)

**A23F 3/18** (2013.01 - EP US); **A23F 5/262** (2013.01 - EP US); **A23L 2/52** (2013.01 - US); **A47J 31/06** (2013.01 - US); **A47J 31/0605** (2013.01 - EP US); **A47J 31/0615** (2013.01 - EP US); **A47J 31/0642** (2013.01 - EP US); **A47J 31/407** (2013.01 - US); **A47J 31/44** (2013.01 - US); **A47J 31/4492** (2013.01 - EP US); **B65D 85/804** (2013.01 - US); **B65D 85/8043** (2013.01 - US); **B65D 85/8058** (2020.05 - EP US); **G01N 27/025** (2013.01 - US); **A23V 2002/00** (2013.01 - US); **B65D 2203/00** (2013.01 - EP US); **Y02W 30/80** (2015.05 - EP US)

Citation (applicant)

- EP 0451980 A2 19911016 - GEN FOODS KRAFT LTD [GB]
- WO 2011141532 A1 20111117 - NESTEC SA [CH], et al
- WO 2012010317 A1 20120126 - KRUEGER GMBH & CO KG [DE], et al

Citation (search report)

- [IPAY] AT 511332 A4 20121115 - SUESS DIETER DR [AT], et al
- [A] CN 2636781 Y 20040901 - WEI KUNLIAN [CN]
- [A] WO 2007019993 A1 20070222 - AQUIS WASSER LUFT SYSTEME GMBH [CH], et al
- [IDAY] WO 2012010317 A1 20120126 - KRUEGER GMBH & CO KG [DE], et al
- [IA] EP 0455337 A1 19911106 - GEN FOODS KRAFT LTD [GB]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2014006048 A2 20140109; WO 2014006048 A3 20140403; WO 2014006048 A8 20150312;** AR 095690 A1 20151104; AU 2013285522 A1 20141211; AU 2013285522 B2 20160204; AU 2013285523 A1 20141211; AU 2013285523 B2 20150528; AU 2013285524 A1 20141211; AU 2013285524 B2 20160225; AU 2013285525 A1 20141211; AU 2013285525 B2 20160204; AU 2013285526 A1 20141211; AU 2013285526 B2 20161110; AU 2013285527 A1 20141211; AU 2013285527 B2 20160128; AU 2013285528 A1 20141211; AU 2013285528 B2 20150709; AU 2016277662 A1 20170119; BR 112014029671 A2 20170627; BR 112014029864 A2 20190813; BR 112014029864 B1 20201229; BR 112014029871 A2 20170627; BR 112014029872 A2 20170627; BR 112014029875 A2 20170627; BR 112014029875 B1 20201222; BR 112014029878 A2 20190820; BR 112014029878 B1 20201110; CA 2876089 A1 20140109; CA 2876091 A1 20140109; CA 2876091 C 20151201; CA 2876301 A1 20140109; CA 2876302 A1 20140109; CA 2876526 A1 20140109; CA 2876531 A1 20140109; CA 2876533 A1 20140109; CA 2876533 C 20160419; CL 2014003261 A1 20151002; CL 2014003262 A1 20151002; CL 2014003263 A1 20151002; CL 2014003264 A1 20151002; CL 2014003265 A1 20151002; CL 2014003267 A1 20151002; CL 2014003268 A1 20151002; CN 104349701 A 20150211; CN 104349701 B 20171013; CN 104349702 A 20150211; CN 104349702 B 20171114; CN 104379031 A 20150225; CN 104379031 B 20170609; CN 104379469 A 20150225; CN 104394740 A 20150304; CN 104394740 B 20161116; CN 104394741 A 20150304; CN 104394741 B 20170711; CN 104394742 A 20150304; CN 104394742 B 20170908; CN 110436060 A 20191112; CN 110436060 B 20210319; DK 2833764 T3 20160201; DK 2838404 T3 20160208; DK 2869738 T3 20160329; DK 2869739 T3 20160606; DK 2869740 T3 20160829; DK 2869741 T3 20160517; EA 027167 B1 20170630; EA 027168 B1 20170630; EA 027168 B9 20180228; EA 028346 B1 20171130; EA 028463 B1 20171130; EA 028464 B1 20171130; EA 031094 B1 20181130; EA 031158 B1 20181130; EA 201491861 A1 20150529; EA 201491868 A1 20150529; EA 201491872 A1 20150529; EA 201491877 A1 20150529; EA 201491896 A1 20150529; EA 201491897 A1 20150529; EA 201491955 A1 20150630; EP 2833764 A2 20150211; EP 2833764 B1 20151118; EP 2838404 A2 20150225; EP 2838404 B1 20151202; EP 2869738 A2 20150513; EP 2869738 B1 20160120; EP 2869739 A2 20150513; EP 2869739 B1 20160406; EP 2869740 A2 20150513; EP 2869740 B1 20160525; EP 2869741 A2 20150513; EP 2869741 B1 20160316; EP 2870080 A2 20150513; EP 2870080 B1 20180221; EP 2974632 A1 20160120; EP 2974632 B1 20190424; EP 2987432 A1 20160224; EP 2987432 B1 20190313; EP 2989942 A1 20160302; EP 2989942 B1 20190911; EP 3184009 A1 20170628; ES 2559049 T3 20160210; ES 2560622 T3 20160222; ES 2564403 T3 20160322; ES 2570728 T3 20160520;

ES 2574647 T3 20160621; ES 2588024 T3 20161028; HK 1206570 A1 20160115; HK 1206571 A1 20160115; HK 1206952 A1 20160122; HK 1206953 A1 20160122; HK 1207808 A1 20160212; HK 1207809 A1 20160212; HK 1208324 A1 20160304; IN 2616MUN2014 A 20150911; IN 2617MUN2014 A 20150911; IN 2618MUN2014 A 20150911; IN 2619MUN2014 A 20150911; IN 2620MUN2014 A 20150911; IN 2624MUN2014 A 20151016; IN 2626MUN2014 A 20150911; JP 2015525588 A 20150907; JP 2015525589 A 20150907; JP 2015525590 A 20150907; JP 2015525591 A 20150907; JP 2015526130 A 20150910; JP 2015527103 A 20150917; JP 2015528715 A 20151001; JP 5897775 B2 20160330; JP 5917773 B2 20160518; JP 6109933 B2 20170405; JP 6162232 B2 20170712; JP 6185057 B2 20170823; JP 6185058 B2 20170823; JP 6240184 B2 20171129; MY 159604 A 20170113; MY 167440 A 20180828; NZ 702646 A 20160930; NZ 702656 A 20161028; NZ 702687 A 20160930; NZ 702693 A 20170331; NZ 702709 A 20170331; PL 2833764 T3 20160531; PL 2838404 T3 20160630; PL 2869738 T3 20160729; PL 2869739 T3 20160930; PL 2869740 T3 20170831; PL 2869741 T3 20160930; PT 2838404 E 20160122; PT 2869739 T 20160715; PT 2869740 T 20160719; US 10004248 B2 20180626; US 10143214 B2 20181204; US 11191286 B2 20211207; US 2015143999 A1 20150528; US 2015150409 A1 20150604; US 2015164263 A1 20150618; US 2015173558 A1 20150625; US 2015190010 A1 20150709; US 2015296827 A1 20151022; US 2015297018 A1 20151022; US 2017135364 A1 20170518; WO 2014006049 A2 20140109; WO 2014006049 A3 20140403; WO 2014006049 A8 20150312; WO 2014006050 A2 20140109; WO 2014006050 A3 20140327; WO 2014006051 A2 20140109; WO 2014006051 A3 20140515; WO 2014006052 A2 20140109; WO 2014006052 A3 20140515; WO 2014006053 A2 20140109; WO 2014006053 A3 20140327; WO 2014006053 A8 20150312; WO 2014006054 A2 20140109; WO 2014006054 A3 20140410; ZA 201408492 B 20160831; ZA 201408496 B 20160831; ZA 201408497 B 20160831; ZA 201408498 B 20160831; ZA 201408499 B 20160831; ZA 201408500 B 20160831; ZA 201506454 B 20161221

DOCDB simple family (application)

**EP 2013063942 W 20130702;** AR P140101302 A 20140320; AU 2013285522 A 20130702; AU 2013285523 A 20130702; AU 2013285524 A 20130702; AU 2013285525 A 20130702; AU 2013285526 A 20130702; AU 2013285527 A 20130702; AU 2013285528 A 20130702; AU 2016277662 A 20161222; BR 112014029671 A 20130702; BR 112014029864 A 20130702; BR 112014029871 A 20130702; BR 112014029872 A 20130702; BR 112014029875 A 20130702; BR 112014029878 A 20130702; CA 2876089 A 20130702; CA 2876091 A 20130702; CA 2876301 A 20130702; CA 2876302 A 20130702; CA 2876526 A 20130702; CA 2876531 A 20130702; CA 2876533 A 20130702; CL 2014003261 A 20141128; CL 2014003262 A 20141128; CL 2014003263 A 20141128; CL 2014003264 A 20141128; CL 2014003265 A 20141128; CL 2014003267 A 20141128; CL 2014003268 A 20141128; CN 201380030204 A 20130702; CN 201380030340 A 20130702; CN 201380030343 A 20130702; CN 201380030380 A 20130702; CN 201380030450 A 20130702; CN 201380030459 A 20130702; CN 201380030460 A 20130702; CN 201910806157 A 20130702; DK 13732585 T 20130702; DK 13732586 T 20130702; DK 13732587 T 20130702; DK 13732588 T 20130702; DK 13732590 T 20130702; DK 13736827 T 20130702; EA 201491861 A 20130702; EA 201491868 A 20130702; EA 201491872 A 20130702; EA 201491877 A 20130702; EA 201491896 A 20130702; EA 201491897 A 20130702; EA 201491955 A 20130702; EP 13732585 A 20130702; EP 13732586 A 20130702; EP 13732587 A 20130702; EP 13732588 A 20130702; EP 13732589 A 20130702; EP 13732590 A 20130702; EP 13736827 A 20130702; EP 15180266 A 20130702; EP 15188010 A 20130702; EP 15188381 A 20130702; EP 17155955 A 20130702; EP 2013063943 W 20130702; EP 2013063946 W 20130702; EP 2013063947 W 20130702; EP 2013063948 W 20130702; EP 2013063949 W 20130702; EP 2013063950 W 20130702; ES 13732585 T 20130702; ES 13732586 T 20130702; ES 13732587 T 20130702; ES 13732588 T 20130702; ES 13732590 T 20130702; ES 13736827 T 20130702; HK 15107320 A 20150730; HK 15107375 A 20150731; HK 15107734 A 20150811; HK 15107735 A 20150811; HK 15107736 A 20150811; HK 15107737 A 20150811; HK 15109231 A 20150919; IN 2616MUN2014 A 20141224; IN 2617MUN2014 A 20141224; IN 2618MUN2014 A 20141224; IN 2619MUN2014 A 20141224; IN 2620MUN2014 A 20141224; IN 2624MUN2014 A 20141224; IN 2626MUN2014 A 20141224; JP 2015519193 A 20130702; JP 2015519194 A 20130702; JP 2015519195 A 20130702; JP 2015519196 A 20130702; JP 2015519197 A 20130702; JP 2015519198 A 20130702; JP 2015519199 A 20130702; MY PI2014003240 A 20130702; MY PI2014003243 A 20130702; NZ 70264613 A 20130702; NZ 70265613 A 20130702; NZ 70268713 A 20130702; NZ 70269313 A 20130702; NZ 70270913 A 20130702; PL 13732585 T 20130702; PL 13732586 T 20130702; PL 13732587 T 20130702; PL 13732588 T 20130702; PL 13732590 T 20130702; PL 13736827 T 20130702; PT 13732587 T 20130702; PT 13732588 T 20130702; PT 13736827 T 20130702; US 201314408617 A 20130702; US 201314408623 A 20130702; US 201314408624 A 20130702; US 201314408634 A 20130702; US 201314408635 A 20130702; US 201314408638 A 20130702; US 201314408639 A 20130702; US 201615349165 A 20161111; ZA 201408492 A 20141119; ZA 201408496 A 20141119; ZA 201408497 A 20141119; ZA 201408498 A 20141119; ZA 201408499 A 20141119; ZA 201408500 A 20141119; ZA 201506454 A 20150902